

What is claimed:

1. A method of stimulating a local immune response in selected cells or tissues, which comprises administering an effective amount of an oligonucleotide analog having at least one phosphorothioate bond to selected cells or tissues.
2. The method of claim 1 wherein the oligonucleotide analog is SEQ ID NO: 1 or SEQ ID NO: 2.
3. The method of claim 1 wherein the selected cells or tissues are infected with a fungus or bacterium.
- 10 4. The method of claim 1 wherein the selected cells or tissues are infected with a virus.
5. The method of claim 4 wherein the virus is Herpes Simplex Virus Type-1, Herpes Simplex Virus Type-2 or Human Papilloma Virus.
- 15 6. The method of claim 4 wherein the tissues are condyloma acuminata.
7. The method of claim 6 wherein the oligonucleotide analog is SEQ ID NO: 1.
8. The method of claim 7 wherein the oligonucleotide
20 analog is administered by intradermal injection into the condyloma.
9. A method of enhancing the efficacy of a therapeutic treatment by stimulating a local immune response in selected cells or tissues by administering an effective
25 amount of an oligonucleotide analog having at least one phosphorothioate bond to the cells or tissues.
10. The method of claim 9 wherein the selected cells or tissues are infected or are cancerous.

11. The method of claim 10 wherein the therapeutic treatment is treatment with an antiinfective drug or surgical excision.

12. The method of claim 10 wherein the selected cells
5 or tissues are infected with a fungus or a bacterium.

13. The method of claim 10 wherein the selected cells or tissues are infected with a virus.

14. The method of claim 13 wherein the virus is Herpes Simplex Virus Type-1, Herpes Simplex Virus Type-2 or
10 Human Papilloma Virus.

15. The method of claim 14 wherein the tissues are condyloma acuminata.

16. The method of claim 15 wherein the oligonucleotide analog is SEQ ID NO: 1.

15 17. The method of claim 15 wherein the therapeutic treatment is surgical excision of the condyloma and wherein the oligonucleotide analog is administered to the excision site at the time of excision.

18. A method of stimulating a local immune response
20 in selected cells or tissues to enhance the antiinfective or anticancer effect of an antisense oligonucleotide analog which comprises administering an effective amount of an antisense oligonucleotide analog having at least one phosphorothioate bond to cells or tissues which are infected
25 or cancerous.

19. The method of claim 18 wherein the oligonucleotide analog is SEQ ID NO: 1 or SEQ ID NO: 2.

20. A method of modulating cytokine release in skin cells which comprises contacting skin cells with an oligonucleotide analog having at least one phosphorothioate bond in an amount sufficient to elicit an immune response
5 resulting in the release of cytokine.

21. The method of claim 20 wherein the cytokine is IL-1 α .

22. The method of claim 20 wherein the oligonucleotide analog is SEQ ID NO: 1.

10 23. An immunopotentiator which comprises an oligonucleotide analog having at least one phosphorothioate bond capable of eliciting a local inflammatory response.

24. The immunopotentiator of claim 23 which is an antisense oligonucleotide.

15 25. The immunopotentiator of claim 24 which has SEQ ID NO: 1, SEQ ID NO: 2 or SEQ ID NO: 3.